

Appl. No. 10/085,378
Amdt. dated 11/01/2004

AMENDMENTS TO THE CLAIMS

In the claims, please amend claim 14 as follows:

1. (original) A process for delivering a polynucleotide complexed with a compound into an extravascular muscle cell of a mammal, comprising:
 - a) mixing the polynucleotide and a polymer to form a complex wherein the zeta potential of the complex is not positive;
 - b) inserting the polynucleotide into a mammalian blood vessel, in vivo;
 - c) increasing the permeability of the blood vessel;
 - d) passing the complex through the blood vessel;
 - e) delivering the complex into the mammalian muscle cell; and,
 - f) expressing the polynucleotide.
- 2-3. (canceled)
4. (original) The process of claim 1 wherein increasing the permeability of the vessel consists of increasing pressure against vessel walls.
5. (original) The process of claim 4 wherein increasing the pressure consists of increasing a volume of fluid within the vessel.
6. (original) The process of claim 5 wherein increasing the volume consists of inserting the polynucleotide in a solution into the vessel.
7. (original) The process of claim 1 wherein the muscle cell is a skeletal muscle cell.
8. (original) The process of claim 7 wherein the skeletal muscle cell is a limb muscle cell.
9. (original) The process of claim 1 wherein the compound is selected from the group consisting of histone, PEI, cationic lipid, poly-L-lysine, histone-lipid, histone-polyamine, and putamine.
10. (original) The process of claim 1 wherein the zeta potential of the complex is negative.
- 11-13. (cancelled)

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14. (currently amended) A process for delivering a polynucleotide complexed with a compound into an extravascular liver cell of a mammal, comprising:
- a) mixing the polynucleotide and a polymer to form a complex wherein the zeta potential of the complex is not positive;
 - b) inserting the polynucleotide into a mammalian blood vessel, in vivo;
 - c) increasing the permeability of the blood vessel;
 - d) passing the complex through the blood vessel;
 - e) delivering the complex into the mammalian ~~muscle~~ liver cell; and,
 - f) expressing the polynucleotide.
15. (original) The process of claim 14 wherein the liver cell consists of an hepatocyte.
- 16-17. (canceled)
18. (previously presented) The process of claim 14 wherein increasing the permeability of the vessel consists of increasing pressure against vessel walls.
19. (original) The process of claim 18 wherein increasing the pressure consists of increasing a volume of fluid within the vessel.
20. (original) The process of claim 19 wherein increasing the volume consists of inserting the polynucleotide in a solution into the vessel.
21. (original) The process of claim 14 wherein the compound is selected from the group consisting of histone, PEI, cationic lipid, poly-L-lysine, histone-lipid, histone-polyamine, and protamine.
22. (original) The process of claim 14 wherein the zeta potential of the complex is negative.